

C. Wilder



1600

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/463,510

DATE: 04/08/2002

TIME: 10:58:15

Input Set : A:\WARF0038.ST25.txt

Output Set: N:\CRF3\04082002\I463510.raw

3 <110> APPLICANT: Helgeson, John P.
4 Austin, Sandra
5 Naess, Sara K.
7 <120> TITLE OF INVENTION: Germplasm And Molecular Markers For Disease Resistance In
Potato
9 <130> FILE REFERENCE: WARF0038
11 <140> CURRENT APPLICATION NUMBER: 09/463,510
12 <141> CURRENT FILING DATE: 2000-06-26
14 <150> PRIOR APPLICATION NUMBER: 60/054,267
15 <151> PRIOR FILING DATE: 1997-07-30
17 <150> PRIOR APPLICATION NUMBER: US98/15910
18 <151> PRIOR FILING DATE: 1998-07-27
20 <160> NUMBER OF SEQ ID NOS: 5
22 <170> SOFTWARE: PatentIn version 3.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 586
26 <212> TYPE: DNA
27 <213> ORGANISM: Solanum bulbocastanum
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32 tgccatgatg gcttaactgg ttgtttcaag tatggccaga acggttattt tatgagagag 120
34 tttccaaaga acatgcaggg taatggtaat ggggataata gaaccagtc ttcttcagt 180
36 actccaccag acagagctgc atctagagga gctacttoga ggcaggcgga ggatcgaacg 240
38 tctttatgct atcactagtc gccaaagaaa agaggattcg ccagatgttg tcaactggtat 300
40 gatccaagtc ttttaactttg attttatact tttctagatc caggagcgag tttatccttt 360
42 gtaactcctt atgttgcggt taattttgat gttcttctta agaaacttat tgagcccttc 420
44 agtgtttcta cacttggttg tctattatag tagagagagt ctgttatgat tgtaccgttt 480
46 tcgtcaatca caagagcacc atggttgatt tagttgagtt agacatgga gaatttgatg 540
48 ttattcttgg tatggactga cttcattctt gttatgcctc agtgcc 586
51 <210> SEQ ID NO: 2
52 <211> LENGTH: 587
53 <212> TYPE: DNA
54 <213> ORGANISM: Solanum bulbocastanum
56 <220> FEATURE:
57 <221> NAME/KEY: misc_feature
58 <222> LOCATION: (88)..(88)
59 <223> OTHER INFORMATION: N is any nucleotide
62 <220> FEATURE:
63 <221> NAME/KEY: misc_feature
64 <222> LOCATION: (221)..(221)
65 <223> OTHER INFORMATION: N is any nucleotide
68 <220> FEATURE:
69 <221> NAME/KEY: misc_feature
70 <222> LOCATION: (251)..(251)

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71 <223> OTHER INFORMATION: N is any nucleotide
74 <220> FEATURE:
75 <221> NAME/KEY: misc_feature
76 <222> LOCATION: (290)..(290)
77 <223> OTHER INFORMATION: N.is any nucleotide
80 <400> SEQUENCE: 2
81 gtggtccgca tataactcaa gaacttgtaa tgcattgtatc ggatatatgt atacatgttg      60
W--> 83 tcttttgcaa agtttacttt tttattantt aatcttggtt gtgtctggag gtggtggtgg      120
85 ggtgggtag tagtggaagct agaaatttag ttaagtgtgt tcaagattta aatatacata      180
W--> 87 tgaaaaataa tttttgatct atatatatag ttataatttt ntgatgaagg tagttcaact      240
W--> 89 gaccacccgt nactacatgt ggctaccgta ctgggtgggg tggaaggctn tgggtgtttac      300
91 agtcatgttg gggcctctga aatgcttttg tgggcaatgt ggaattact gtttatcttt      360
93 tctttattga agtcattgag tgtttgagtt atttaactat gaaaggtagc tagtgggtaa      420
95 tgttattgat gactttgtgt gaagaacaaa atgtcaatca ttcagagcgt tcaatggggg      480
97 cacgtgctgg agtcccatth ggattatttg gtttaggggt tgcctagggt gtggtggtgg      540
99 tggttggtaa tggataataa tgttggtgaa atatgggtgc ggaggag      587
102 <210> SEQ ID NO: 3
103 <211> LENGTH: 596
104 <212> TYPE: DNA
105 <213> ORGANISM: Lycopersicon esculentum
107 <400> SEQUENCE: 3
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110 atagttgtag acaaccctgt aatctcagga gacaaaatga tgtttgcccc aattgcggtg      120
112 gtggatttgt tcaagagctt gaagacataa cgagtagtag ttagataat cagaccaga      180
114 ggccgagatt catggaatcc gtctcaaaact ttttaagacg acaaactctca gctacaagta      240
116 atacttctga gagagggaga tctgatgggg gtgctgaacg aggaaatttg tggaatccgt      300
118 tgctgatttt cagtgggtgat acgctgttgc atatgcctgg ggatggtgga gttttggagt      360
120 ttcttaatga ggcaccttgg attccgagca agaaaatggt ggtgattatt ttgttggtcc      420
122 aggagtggag gaattttttg aagaaattgt aaatagaaat cagcgtgggt ctccctctcc      480
124 tgtctcgaga tgttcaattg attccctacc aacagtcaag atatcaaaaa aggatgtag      540
126 atcggattcg cactgacctg tttgtaagga gaaatttgct ctggggacta aggcaa      596
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130 <211> LENGTH: 589
131 <212> TYPE: DNA
132 <213> ORGANISM: Solanum tuberosum
134 <400> SEQUENCE: 4
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137 atagttgtag acaaccctgt aatctcagga gacaaaatga tgtttgcccc aattgcagtg      120
139 gtggatttgt tcaagagctt gaagacataa cgagtagtag ttagataat cagagccaga      180
141 ggccgagatt tatggaatcc gtctcaaaact ttttaagacg acaaactcgt acaagtaata      240
143 cttctgagag agggagatct gatgggggtg ctgaacgagg aaatttatgg aatccattgc      300
145 tgattttcag tggtgatacg cctgttcaag atgcctgggg atggtggagt tttggagttt      360
147 cttaatgagg ctcttggctt ccgacaagaa aatgggtggg attattttgt tgggtccagga      420
149 gtggaggaat tttttgaaga aattgtaaat agaaatcagc gtggtgctcc tcctgctca      480
151 agatgttcaa ttgattccct accaacagtc aagatatcga aaaaagatgt tagatcgga      540
153 tctcactgcc ctgtttgtaa agagaaattt gctctgggga ctaaggcaa      589
156 <210> SEQ ID NO: 5
157 <211> LENGTH: 592
158 <212> TYPE: DNA

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159 <213> ORGANISM: Solanum bulbocastanum

161 <220> FEATURE:

162 <221> NAME/KEY: misc_feature

163 <222> LOCATION: (405)..(405)

164 <223> OTHER INFORMATION: N is any nucleotide

167 <400> SEQUENCE: 5

168 gttgggcaga agagctagga agagtaagca tgtcaagtga cagttgcagc cactggtggt 60

170 atagttgtag acaaccctg aatctcagca gacaaaatga tgtttgcccc aattgcggtg 120

172 gtggatttgt tcaagagctt gaagacataa cgagtagtag ttagataat cagagccaga 180

174 ggccgagatt catggaatcc gtctcaaact ttttaagacg acaaatccca actacaagta 240

176 atacttcttg agagagggag atctgatggg ggtgctgaac gaggaatttt gtggaatccg 300

178 ttgctgattt tcagtgggtga tacacctgtt cggatgcctg gggatggtgg agttttggag 360

W--> 180 tttcttaatg aggctcttgg ctttcgacaa gaaaatggtg gtgantattt tgttggccca 420

182 ggagtggagg agttttttga agaaattgta aataaaaatc agcgtggtgc tcctcctgtc 480

184 tcaagatgct caattgattc cctaccaaca gtcaagatat cgaaaaagga tgttagatcg 540

186 gattctcact gccctgtttg taaagagaaa ttgctctgg ggactaaggc aa 592

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/463,510

DATE: 04/08/2002

TIME: 10:58:16

Input Set : A:\WARF0038.ST25.txt

Output Set: N:\CRF3\04082002\I463510.raw

L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5